## Pengaruh Variasi Water Transfer Printing Terhadap Tingkat Polishing dan Hardness pada Kualitas Pengecatan Bodi Kendaraan

(The Effect of Water Transfer Printing Film Variations on the levels of Polishing and Hardness Vehicle Body Painting Quality)
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## ABSTRACT

Water Transfer Printing was a development and innovation in one of the fields of painting that was useful for facilitated and lightened human works because it could made a faster work in painting fields and able to added some variations (patterns or motifs) of painting by immersion rather than other painting processes. This research method used an experimental method, namely by tested the level of paint resistance and paint coating hardness on the quality of vehicle body painting. This research was placed in Automotive Machine Laboratory in State Polytechnic of Jember. The highest paint resistance test results are found in the aurora film brand with 100% results in 30 seconds, it can be concluded that the lower value of fading area, the less quality of the paint specimen. It happened because the specimen paint was not resistant to fabrics rubbed for long period and caused the specimen paint fade, but the higher non-fading area value, the better and resistant to gasoline. The results of the paint coating hardness test with the highest value are found in the aurora film brand, because the specimen appears scratched by 2H to 6H pencils, it can be concluded that the lower hardness value of the paint layer, the less quality of the paint specimen so that could be easily scratched, but the higher hardness layer value, the better quality of the specimen and resistant to the pencil scratches.

**Keywords:** Film, pencil, water transfer printing